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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/676,943

09/30/2003

Katsuyuki Ochiai

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EXAMINER

HUYNH, NAM TRUNG

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 05/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/676,943	<b>Applicant(s)</b> OCHIAI ET AL.	
	<b>Examiner</b> Nam Huynh	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                    |                                                                             |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____                                                |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/30/03</u> .                                                             | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giordano et al. (US 2002/0152123) in view of Greene et al. (US 2003/0125017), and in further view of Parsons (US 5,287,089).

A. Regarding claim 1, Giordano et al. discloses a system and method for processing financial transactions comprising:

- A wireless customer transceiver (first transceiver) (page 2, paragraph 0011).
- A merchant transceiver (second transceiver), which can be associated with a vending machine (snacks, cigarettes, stamps, etc.), pay phone, etc. for authorizing customer transactions, which render a commodity/service providing apparatus (pages 2 and 8, paragraphs 011 and 0065). It is well known in the art

that these apparatus's comprise buttons that are pressed down with the body of the user to allow a desired selection for a service/commodity to be made.

- A transaction processing system, or host computer (first and second computer) (page 2, paragraph 011).

In the invention of Giordano et al., the wireless customer transceiver is used to make a financial transaction (communicate monetary information) from a merchant transceiver via the transaction processing system. The invention allows the use of biometric data recording device in order to operate the customer transceiver to make transactions with the merchant transceiver (page 7, paragraph 0070). Although the invention may be associated with commodity/service providing apparatus's and corresponding buttons as described above, the invention does not explicitly disclose the use of the human body to serve as an electric-field propagating medium according to information to be transmitted by detecting the electric field induced by the human body. Greene et al. discloses a healthcare personal network in which a patient wears a network device having the capability to transmit and/or receive data with another network device via the personal area network (page 2, paragraph 031 and figure 1). Greene et al. teaches that the natural salinity of the human body makes it a conductor of electrical current and that the personal area network takes advantage of this conductivity by creating an external electric field that passes a very small current through the body, over which data is carried (page 3, paragraph 0034). Therefore it would have been obvious to one of ordinary skill in the art to allow the buttons of the commodity/service providing apparatus's of Giordano et al. to sense the electric field induced by the human body, as

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taught by Greene et al, in order to allow a user to transfer identification data or other data required for authentication by touching the button. This added capability has the advantage of allowing a user to avoid having to authenticate through a keypad or other various authentication methods. The merchant transceiver can receive data pertaining to the customer transceiver through a simple touch.

Furthermore the combination of Giordano et al. and Greene et al. does not explicitly disclose that the buttons comprise a conductive pusher, a switch, and an insulator. Parsons discloses a computer input device that comprises the following:

- A flexible actuator (figure 1, item 10) that is interfaced with a conductive film pattern (figure 1, item 22). The combination of these two components renders the "conductive pusher".
- A central post (figure 4, item 38) that can be used as a switching means for controlling a function and being actuated by applying force to the button (claim 3).
- An insulator (figure 1, item 20) that is used to provide spacing between a resistive film and a conductive film (column 2, lines 63-67).

Therefore it would have been obvious to one of ordinary skill in the art to implement the button structure taught by Parsons in the combination of Giordano et al. and Greene et al. in order for the system to function as intended. It is well known in the art that a button has switching, conducting, and insulating means in order to allow a user to make a selection.

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B. Regarding claims 2-4, one of ordinary skill in the art would recognize that a vending machine or pay phone comprises a plurality of buttons that allow a user to make a desired selection. Therefore it would have been further obvious to provide a transceiver for each button so that information can be sent to the transaction processing system corresponding to the particular selection.

C. Regarding claim 5, Parsons discloses an insulator (figure 1, item 20) that is used to provide spacing between a resistive film and a conductive film (column 2, lines 63-67).

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Giordano et al. (US 2002/0152123), Greene et al. (US 2003/0125017), and Parsons (US 5,287,089) as applied to claim 1 above, and further in view of Benson et al. (US 6,888,537).

The combination of Giordano et al., Greene et al., and Parsons discloses the limitations set forth in claim 1, but does not explicitly close a protective thin film to cover the pusher. Benson et al. discloses a configurable operator panel that comprises buttons with an electrically conductive portion (figure 1a, item 10) that is protected by a top protective layer (figure 1b, item 31) (column 7, lines 60-67). Therefore it would have been obvious to one of ordinary skill in the art to add a protective layer for the pusher of the button, as taught by Benson et al., in the combination of Giordano et al., Greene et al., and Parsons in order to protect the conductive portion of the buttons of the commodity/service apparatus. This added component would allow the button to maintain its conductivity and protect it from the surrounding environment.


**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nam Huynh whose telephone number is 571-272-5970. The examiner can normally be reached on 8 a.m.-5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NTH  
4/27/06

  
GEORGE ENG  
SUPERVISORY PATENT EXAMINER